Amendment to the Claims:

1. (Currently Amended) ~~Method~~ A method for freeze-drying products making use of a chamber [[(1)]] with placement surfaces [[(2)]], whose temperature can be regulated and condensation surfaces [[(5)]], in which water issuing from the product in form of water vapor precipitates on the ~~surface of the~~ condensation ~~areas~~ surfaces, the method comprising:

~~and in which~~ during the course of the freeze-drying process taking measurements ~~are taken~~ for documentation and control of the process, ~~wherein~~ these measurements ~~include~~ including on-going ascertainment of the water vapor flow between the product and the condensation areas [[(5)]] as well as partial water vapor measurements, ~~characterized in that~~ the water vapor flows ~~are~~ being ascertained from the on-going measurements of the partial water vapor pressure and the flow resistance for the water vapor between the placement surfaces and the condensation surfaces; [[(5)]] and

calculating ~~that the~~ water volume issued from the product in form of water vapor ~~is calculated~~ via temporal integration of the water vapor flow.

2. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterized in that~~ further comprising:

measuring the flow resistance in a freeze-drying facility ~~is measured~~ once each for different pressures and ~~that~~ storing these values, ~~are stored and that~~ ascertainment of the water vapor flow takes place being dependent upon pressure.

3. (Currently Amended) ~~Method~~ The method according to claim 1 [[or 2]], ~~characterized in that~~ wherein the partial water vapor pressure is frequently measured, preferably 10 to 100 times per second.

4. (Currently Amended) ~~Method~~ The method according to ~~one of claims~~ claim 1 [[to 3]], ~~characterized in that~~ wherein the taking of measurements employs an instrument [[(15)]] ~~is employed~~ which utilizes the hydrogen absorption bands in the infra-red spectral range.

5. (Currently Amended) ~~Method~~ The method according to claim 4, ~~characterized in that~~ wherein the temperature of the measuring instrument [[(15)]] is adjusted to a ~~certain~~ pre-determined temperature.

6. (Currently Amended) ~~Method~~ The method according to claim 4 [[or 5]], ~~characterized in that~~ wherein a temperature dependency of the measuring instrument [[(15)]] is recorded and stored ~~in the computer~~ [[(17)]] and ~~that~~ the supplied measuring values are respectively converted to a constant temperature.

7. (Currently Amended) ~~Method~~ The method according to ~~one of the preceding claims~~ claim 1, ~~characterized in that~~ wherein a control unit [[(19)]] is assigned to ~~the~~ a computer [[(17)]] and that the freeze-drying process is controlled on the basis of values ascertained by the computer [[(17)]].

8. (Currently Amended) ~~Device~~ A device for freeze-drying products making use of a freeze-drying chamber [[(1)]] with placement surfaces [[(2)]] whose temperature can be controlled and condensation surfaces [[(5)]] in which water issuing from the product in form of water vapor precipitates on the surface of the condensation surfaces and in which, during the course of the freeze-drying process, measurements are taken for documentation and control of the process, ~~characterized in that~~ the device comprising:

~~it is equipped with~~ a measuring instrument [[(15)]] for on-going measurement of the partial water vapor pressure; and

~~that~~ a computer [[(17)]] ~~is provided~~ with the aid of which the water vapor flow is calculated from the current measurements of the partial water vapor pressure and of the flow resistance of the water vapor between the placement surfaces [[(2)]] and the condensation surfaces [[(5)]] and, furthermore, a calculation is done by temporal integration of the water volume which issues from the product.

9. (Currently Amended) ~~Device~~ The device according to claim 8, ~~characterized in that~~ wherein the measuring instrument [[(15)]] is arranged within the freeze-drying chamber [[(1)]] ~~namely~~ at a location where the flow velocity of the water vapor is small relative to the sound velocity.

10. (Currently Amended) ~~Device~~ The device according to claim 8 [[or 9]], ~~characterized in that~~ further including:

screening sheets, [[(16)]] preferably temperature-controllable, ~~are~~ assigned to the measuring instrument [[(15)]].

11. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 8 [[to 10]], ~~characterized in that~~ further including:

screening units [[(21)]] ~~are~~ located between the placement surfaces [[(2)]] and at least a part of ~~the~~ interior chamber surfaces.

12. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 8 [[to 11]], ~~characterized in that~~ wherein the placement surfaces [[(2)]] and the condensation surfaces [[(5)]] are respectively located in the freeze-drying chamber and a condenser chamber [[(1) or (4)]], ~~wherein~~ and the two chambers [[(1, 4)]] are connected with each other via an opening [[(10)]].

13. (Currently Amended) ~~Device~~ The device according to claim 12, ~~characterized in that~~ further including:

~~opening~~ [[(10)]] ~~is assigned~~ a valve [[(11)]] assigned to the opening and activatable on the side of the condenser chamber, ~~with~~ the valve including a valve plate [[(12)]], preferably arched in the direction of the freeze-drying chamber [[(1)]].

14. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 8 [[to 13]], ~~characterized in that~~ further including:

a displacement body ~~is~~ located in the area of the condensation surfaces [[(5)]] whose diameter increases in flow direction in accordance with the decrease of the vapor volume.

15. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 12 [[to 14]], ~~characterized in that~~ wherein the opening [[(10)]] is designed extending length-wise~~, for example in form of a slit~~.

16. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 8 [[to 11]], ~~characterized in that~~ wherein the condensation surfaces [[(5)]] are located in the freeze-drying chamber [[(1)]].

17. (Currently Amended) ~~Device~~ The device according to claim 16 ~~and claim 10~~, ~~characterized in that~~ wherein the condensation surfaces [[(5)]] are located within ~~the~~ screening units [[(21, 29)]].

18. (Currently Amended) ~~Device~~ The device according to ~~one of claims~~ claim 8 [[to 17]], ~~characterized in that~~ further including:

a control instrument [[(19)]] ~~is provided,~~ which controls, at least in part, the freeze-drying process taking place inside the chamber [[(1)]] on the basis of signals delivered by the computer [[(17)]].